MongoDB Day 1

Product JSON:

For the following question write the corresponding MongoDB queries

1. Find all the information about each products
2. Find the product price which are between 400 to 800
3. Find the product price which are not between 400 to 600
4. List the four product which are greater than 500 in price
5. Find the product name and product material of each products
6. Find the product with a row id of 10
7. Find only the product name and product material
8. Find all products which contain the value of soft in product material
9. Find products which contain product color indigo and product price 492.00
10. Delete the products which product price value are same

1. Find all the information about each products


```
test> db.createCollection("products")
{ ok: 1 }
test> db.products.find({})
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c35'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c36'),
    id: '2',
    product_name: 'Practical Fresh Sausages',
    product_price: 911,
    product_material: 'Cotton',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c37'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c38'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_price: 492,
    product_material: 'Soft',
    product_color: 'plum'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c39'),
    id: '5',
    product_name: 'Sleek Cotton Chair',
    product_price: 33,
    product_material: 'Fresh',
    product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3a'),
    id: '6',
    product_name: 'Awesome Wooden Towels',
    product_price: 474,
    product_material: 'Plastic',
```



```
    product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3a'),
    id: '6',
    product_name: 'Awesome Wooden Towels',
    product_price: 474,
    product_material: 'Plastic',
    product_color: 'orange'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3b'),
    id: '7',
    product_name: 'Practical Soft Shoes',
    product_price: 500,
    product_material: 'Rubber',
    product_color: 'pink'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3c'),
    id: '8',
    product_name: 'Incredible Steel Hat',
    product_price: 78,
    product_material: 'Rubber',
    product_color: 'violet'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3d'),
    id: '9',
    product_name: 'Awesome Wooden Ball',
    product_price: 28,
    product_material: 'Soft',
    product_color: 'azure'
  },
test>
    _id: ObjectId('65d0ccefedff95c94c245c3e'),
    id: '10',
    product_name: 'Generic Wooden Pizza',
    product_price: 84,
    product_material: 'Frozen',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3f'),
    id: '11',
    product_name: 'Unbranded Wooden Cheese',
    product_price: 26,
    product_material: 'Soft',
    product_color: 'black'
  },
```

```
      product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c40'),
    id: '12',
    product_name: 'Unbranded Plastic Salad',
    product_price: 89,
    product_material: 'Wooden',
    product_color: 'pink'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c41'),
    id: '13',
    product_name: 'Gorgeous Cotton Keyboard',
    product_price: 37,
    product_material: 'Concrete',
    product_color: 'sky blue'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c42'),
    id: '14',
    product_name: 'Incredible Steel Shirt',
    product_price: 54,
    product_material: 'Metal',
    product_color: 'white'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c43'),
    id: '15',
    product_name: 'Ergonomic Cotton Hat',
    product_price: 43,
    product_material: 'Rubber',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c44'),
    id: '16',
    product_name: 'Small Soft Chair',
    product_price: 47,
    product_material: 'Cotton',
    product_color: 'teal'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c45'),
    id: '17',
    product_name: 'Incredible Metal Car',
    product_price: 36,
    product_material: 'Fresh',
    product_color: 'indigo'
  },
```

```
    product_price: 43,
    product_material: 'Rubber',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c44'),
    id: '16',
    product_name: 'Small Soft Chair',
    product_price: 47,
    product_material: 'Cotton',
    product_color: 'teal'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c45'),
    id: '17',
    product_name: 'Incredible Metal Car',
    product_price: 36,
    product_material: 'Fresh',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c46'),
    id: '18',
    product_name: 'Licensed Plastic Bacon',
    product_price: 88,
    product_material: 'Steel',
    product_color: 'yellow'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c47'),
    id: '19',
    product_name: 'Intelligent Cotton Chips',
    product_price: 46,
    product_material: 'Soft',
    product_color: 'azure'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c48'),
    id: '20',
    product_name: 'Handcrafted Wooden Bacon',
    product_price: 36,
    product_material: 'Concrete',
    product_color: 'lime'
  }
]
Type "it" for more
test>
```

2.Find the product price which are between 400 to 800

test> db.products.find({ "products_price": {"$gte": 400,"$lte": 800} })

test> db.products.find({ "product_price": {"$gte": 400,"$lte": 800} })
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c35'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c37'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c38'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_price: 492,
    product_material: 'Soft',
    product_color: 'plum'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3a'),
    id: '6',
    product_name: 'Awesome Wooden Towels',
    product_price: 474,
    product_material: 'Plastic',
    product_color: 'orange'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3b'),
    id: '7',
    product_name: 'Practical Soft Shoes',
    product_price: 500,
    product_material: 'Rubber',
    product_color: 'pink'Soft Chair',
  } product_price: 47,
]   product_material: 'Cotton',
test> },
    {
      _id: ObjectId('65d0ccefedff95c94c245c45'),

  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3b'),
    id: '7',
    product_name: 'Practical Soft Shoes',
    product_price: 500,
    product_material: 'Rubber',
    product_color: 'pink'Soft Chair',
  } product_price: 47,
]   product_material: 'Cotton',
test> },
  {
    _id: ObjectId('65d0ccefedff95c94c245c45'),
    id: '17',
    product_name: 'Incredible Metal Car',
    product_price: 36,
    product_material: 'Fresh',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c46'),
    id: '18',
    product_name: 'Licensed Plastic Bacon',
    product_price: 88,
    product_material: 'Steel',
    product_color: 'yellow'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c47'),
    id: '19',
    product_name: 'Intelligent Cotton Chips',
    product_price: 46,
    product_material: 'Soft',
    product_color: 'azure'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c48'),
    id: '20',
    product_name: 'Handcrafted Wooden Bacon',
    product_price: 36,
    product_material: 'Concrete',
    product_color: 'lime'
  }
]
Type "it" for more
test>

3. Find the product price which are not between 400 to 600

```
]
Type "it" for more
test> db.products.find({"product_price": {"$not": {"$gte": 400,"$lte": 600}}})
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c35'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c36'),
    id: '2',
    product_name: 'Practical Fresh Sausages',
    product_price: 911,
    product_material: 'Cotton',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c37'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c39'),
    id: '5',
    product_name: 'Sleek Cotton Chair',
    product_price: 33,
    product_material: 'Fresh',
    product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3c'),
    id: '8',
    product_name: 'Incredible Steel Hat',
    product_price: 78,
    product_material: 'Rubber',
    product_color: 'violet'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3d'),
    id: '9',
    product_name: 'Awesome Wooden Ball',
    product_price: 28,
    product_material: 'Soft',
```

```
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3e'),
    id: '10',
    product_name: 'Generic Wooden Pizza',
    product_price: 84,
    product_material: 'Frozen',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3f'),
    id: '11',
    product_name: 'Unbranded Wooden Cheese',
    product_price: 26,
    product_material: 'Soft',
    product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c40'),
    id: '12',
    product_name: 'Unbranded Plastic Salad',
    product_price: 89,
    product_material: 'Wooden',
    product_color: 'pink'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c41'),
    id: '13',
    product_name: 'Gorgeous Cotton Keyboard',
    product_price: 37,
    product_material: 'Concrete',
    product_color: 'sky blue'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c42'),
    id: '14',
    product_name: 'Incredible Steel Shirt',
    product_price: 54,
    product_material: 'Metal',
    product_color: 'white'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c43'),
    id: '15',
    product_name: 'Ergonomic Cotton Hat',
    product_price: 43,
    product_material: 'Rubber',
    product_color: 'mint green'
  },
  {
```

},
{
  _id: ObjectId('65d0ccefedff95c94c245c44'),
  id: '16',
  product_name: 'Small Soft Chair',
  product_price: 47,
  product_material: 'Cotton',
  product_color: 'teal'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c45'),
  id: '17',
  product_name: 'Incredible Metal Car',
  product_price: 36,
  product_material: 'Fresh',
  product_color: 'indigo'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c46'),
  id: '18',
  product_name: 'Licensed Plastic Bacon',
  product_price: 88,
  product_material: 'Steel',
  product_color: 'yellow'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c47'),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c48'),
  id: '20',
  product_name: 'Handcrafted Wooden Bacon',
  product_price: 36,
  product_material: 'Concrete',
  product_color: 'lime'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c49'),
  id: '21',
  product_name: 'Unbranded Granite Chicken',
  product_price: 90,
  product_material: 'Metal',
  product_color: 'gold'
},
{

  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c48'),
  id: '20',
  product_name: 'Handcrafted Wooden Bacon',
  product_price: 36,
  product_material: 'Concrete',
  product_color: 'lime'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c49'),
  id: '21',
  product_name: 'Unbranded Granite Chicken',
  product_price: 90,
  product_material: 'Metal',
  product_color: 'gold'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c4a'),
  id: '22',
  product_name: 'Ergonomic Soft Hat',
  product_price: 99,
  product_material: 'Rubber',
  product_color: 'black'
},
{
  _id: ObjectId('65d0ccefedff95c94c245c4b'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product_material: 'Cotton',
  product_color: 'azure'
}
]
Type "it" for more
test>

4.List the four products which are greater than 500 in price

```
test> db.products.find({"product_price": {"$gt": 500}}).limit(4)
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c35'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c36'),
    id: '2',
    product_name: 'Practical Fresh Sausages',
    product_price: 911,
    product_material: 'Cotton',
    product_color: 'indigo'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c37'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
  }
]
test>
```

5.Find the product name and product material of each products

```
]
Type "it" for more
test> db.products.find({}, { "product_name": 1,"product_material": 1 })
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c35'),
    product_name: 'Intelligent Fresh Chips',
    product_material: 'Concrete'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c36'),
    product_name: 'Practical Fresh Sausages',
    product_material: 'Cotton'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c37'),
    product_name: 'Refined Steel Car',
    product_material: 'Rubber'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c38'),
    product_name: 'Gorgeous Plastic Pants',
    product_material: 'Soft'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c39'),
    product_name: 'Sleek Cotton Chair',
    product_material: 'Fresh'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3a'),
    product_name: 'Awesome Wooden Towels',
    product_material: 'Plastic'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3b'),
    product_name: 'Practical Soft Shoes',
    product_material: 'Rubber'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3c'),
    product_name: 'Incredible Steel Hat',
    product_material: 'Rubber'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3d'),
    product_name: 'Awesome Wooden Ball',
    product_material: 'Soft'
  },
  {
```

},
{
    _id: ObjectId('65d0ccefedff95c94c245c3e'),
    product_name: 'Generic Wooden Pizza',
    product_material: 'Frozen'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c3f'),
    product_name: 'Unbranded Wooden Cheese',
    product_material: 'Soft'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c40'),
    product_name: 'Unbranded Plastic Salad',
    product_material: 'Wooden'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c41'),
    product_name: 'Gorgeous Cotton Keyboard',
    product_material: 'Concrete'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c42'),
    product_name: 'Incredible Steel Shirt',
    product_material: 'Metal'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c43'),
    product_name: 'Ergonomic Cotton Hat',
    product_material: 'Rubber'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c44'),
    product_name: 'Small Soft Chair',
    product_material: 'Cotton'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c45'),
    product_name: 'Incredible Metal Car',
    product_material: 'Fresh'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c46'),
    product_name: 'Licensed Plastic Bacon',
    product_material: 'Steel'
},
{
    _id: ObjectId('65d0ccefedff95c94c245c47'),
    product_name: 'Intelligent Cotton Chips',
    product_material: 'Soft'

{
    _id: ObjectId('65d0ccefedff95c94c245c48'),
    product_name: 'Handcrafted Wooden Bacon',
    product_material: 'Concrete'
}
]
Type "it" for more
test>

6.Find the product with a row id of 10

```
null
test> db.products.findOne({ id: "10" })
{
  _id: ObjectId('65d0ccefedff95c94c245c3e'),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
}
test>
```

7.Find only the product name and product material

```
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
test> db.products.find({}, {"product_name": 1,"product_material": 1,"_id": 0})
[
  {
    product_name: 'Intelligent Fresh Chips',
    product_material: 'Concrete'
  },
  {
    product_name: 'Practical Fresh Sausages',
    product_material: 'Cotton'
  },
  { product_name: 'Refined Steel Car', product_material: 'Rubber' },
  { product_name: 'Gorgeous Plastic Pants', product_material: 'Soft' },
  { product_name: 'Sleek Cotton Chair', product_material: 'Fresh' },
  {
    product_name: 'Awesome Wooden Towels',
    product_material: 'Plastic'
  },
  { product_name: 'Practical Soft Shoes', product_material: 'Rubber' },
  { product_name: 'Incredible Steel Hat', product_material: 'Rubber' },
  { product_name: 'Awesome Wooden Ball', product_material: 'Soft' },
  { product_name: 'Generic Wooden Pizza', product_material: 'Frozen' },
  { product_name: 'Unbranded Wooden Cheese', product_material: 'Soft' },
  {
    product_name: 'Unbranded Plastic Salad',
    product_material: 'Wooden'
  },
  {
    product_name: 'Gorgeous Cotton Keyboard',
    product_material: 'Concrete'
  },
  { product_name: 'Incredible Steel Shirt', product_material: 'Metal' },
  { product_name: 'Ergonomic Cotton Hat', product_material: 'Rubber' },
  { product_name: 'Small Soft Chair', product_material: 'Cotton' },
  { product_name: 'Incredible Metal Car', product_material: 'Fresh' },
  { product_name: 'Licensed Plastic Bacon', product_material: 'Steel' },
  {
    product_name: 'Intelligent Cotton Chips',
    product_material: 'Soft'
  },
  {
    product_name: 'Handcrafted Wooden Bacon',
    product_material: 'Concrete'
  }
]
Type "it" for more
test>
```

8.Find all products which contain the value of "soft" in product material

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000                                    —    □    ×
         }
]
test> db.products.find ({ "product_material": "Soft" })
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c38'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_price: 492,
    product_material: 'Soft',
    product_color: 'plum'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3d'),
    id: '9',
    product_name: 'Awesome Wooden Ball',
    product_price: 28,
    product_material: 'Soft',
    product_color: 'azure'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c3f'),
    id: '11',
    product_name: 'Unbranded Wooden Cheese',
    product_price: 26,
    product_material: 'Soft',
    product_color: 'black'
  },
  {
    _id: ObjectId('65d0ccefedff95c94c245c47'),
    id: '19',
    product_name: 'Intelligent Cotton Chips',
    product_price: 46,
    product_material: 'Soft',
    product_color: 'azure'
  }
]
test>
                                                                          Activate Windows
                                                                          Go to Settings to activate Windows.
```

9.Find products which contain product color indigo and product price 492.00

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000                                    —    □    ×
test> db.products.find({
...   "product_color": "indigo",
...   "product_price": 492
... })
test> db.products.find({"product_color": "plum","product_price": 492})
[
  {
    _id: ObjectId('65d0ccefedff95c94c245c38'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_price: 492,
    product_material: 'Soft',
    product_color: 'plum'
  }
]
test>
                                                                          Activate Windows
                                                                          Go to Settings to activate Windows.
```

10.Delete the products which product price value are same

```
{ acknowledged: true, deletedCount: 0 }
test> db.products.deleteMany({"product_price":{"$in":[]}})
{ acknowledged: true, deletedCount: 0 }
test>
```

```
    }
]
test> db.products.deleteMany({
...   "product_price": {
...     "$in": [
...         // Add all distinct prices you want to delete here
...     ]
...   }
... })
{ acknowledged: true, deletedCount: 0 }
test>
```

Activate Windows
Go to Settings to activate Windows.